

City of Sanibel, Florida
MIS Department Narrative

DEPARTMENT: MIS
FUND: General Fund

Mission Statement:

To insure proper and efficient utilization of technology in order to facilitate cost-effective and mission critical services to the Community. Maintain the necessary service level for response to user and system issues. Maintain a secure technology environment with a high availability necessary for Public Safety operations and disaster considerations. Maintain and implement best practices while identifying technology solutions that streamline business practices.

Operational Responsibilities

The department is composed of the Department Director, and two Support Specialists.

Evaluate and implement new systems through a cost benefit analysis that examines routine business needs, emergency considerations and decreasing costs of technology. Efficiently manage City's technology needs through adequate staffing and fiscally sound outsourcing, 7 days a week, 24 hours a day, with particular attention to the essential city functions provided by the Police and Utility Departments. Currently, this includes:

- Responsibility 1. **Secure Remote Access Non-Public Safety:** Maintain secure access to internal city systems by remote offices and users.
- Responsibility 2. **Secure Remote Access Public Safety:** FDLE approved LAN for access to federal and state data services. In-car, wireless access to these systems for road patrol use and field reporting.
- Responsibility 3. **Radio Communications:** Police Department Radio Coverage issues, FCC Licenses, and tower maintenance issues.
- Responsibility 4. **HTE:** Payroll, Cash Receipts, AR, Payroll, UT Billing, GMBA, Planning and Zoning, Building, Occupational Licenses, Cash Receipts, Code Enforcement. MIS is the first point of contact for HTE and Server issues. These are for performance issues, password lockouts, and use issues.
- Responsibility 5. **Computer Systems:** 69 user desktops, 11 Laptops, 10 Win2003, 5 Windows 2000 and 8 Linux Servers, 1 iSeries, Virus protection, intrusion detection and access security, email with anti-spam and anti-virus, very secure Internet and FDLE connectivity, 2 Remote Video Systems, 5 remote facility VPN access, 3 T1's, and 2 cable modem networks.
- Responsibility 6. **User Support:** PC troubleshooting, new PC setup and separate logon accounts for 7 different systems. These systems cannot be unified with a single sign on.
- Responsibility 7. **Public Records Requests:** Many requests are now being created on CD's per the requestor. Since much of the content is electronic, the MIS department is usually required to assist with the retrieval as well.

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- Responsibility 8. **User Training:** New systems require ongoing training starting with basic introductions and continuing with advanced functionality. When users become proficient with individual systems, the City then realizes the productivity gains from technology.
- Responsibility 9. **MacKenzie Hall Systems:** primary and backup audio, digital recorder and backup digital recorder. This also includes setting up temporary audio system, portable recorder for city meetings off site, and projector system for PowerPoint type presentations.
- Responsibility 10. **Web Site:** press release updates, departmental forms, City Council agendas with packet, City Council Meeting audio and adopted minutes, Planning Commission agendas, and employment openings.
- Responsibility 11. **Email List Server:** email to members of the City's list server press releases and council packets.
- Responsibility 12. **Administrative Duties:** Timesheets, technology purchases, RFQ/RPF creation, Bid Specs, departmental annual budget and CIP, annual staff continuing education, and purchasing card reconciliation.
- Responsibility 13. **Technology Task Force:** members from each department meet to discuss technology issues, particularly those that are inter-departmental.
- Responsibility 14. **HTE Implementation Committee:** members from each department meet to discuss HTE issues and the plan to upgrade all the HTE applications to the current versions.
- Responsibility 15. **GIS Project Plan:** members for departments with GIS needs meet to plan and implement GIS for the City.
- Responsibility 16. **Digital Photo and Video:** assist PD with transfer of digital sources to servers and write once media. Transfer other digital media for departments as needed.
- Responsibility 17. **Server Backups:** 4 tape backup systems are used for the city's 15 servers. Additionally, data is synched daily to a standby server that is deployed to the off island command center in times of emergency. MIS also manages off site storage of backups.
- Responsibility 18. **Email:** Microsoft Exchange server for 130 email accounts.
- Responsibility 19. **Admin Copier and Copy Center Server:** Xerox's advanced technology copier/scanner. As users begin to use the advanced features of this system, MIS becomes more involved with user issues. This is a key component of the creation of the Council Packet.
- Responsibility 20. **Community Alert Telephone System:** computer based dialer to notify the community of important information.
- Responsibility 21. **Hurricane Hotline:** 800 number used to keep the community informed of hurricane related information during an emergency.
- Responsibility 22. **City Cell Phones and Beepers:** billing, maintenance, emergency supplies and support. Maintain backup cell phones from a variety of providers for use in an emergency.
- Responsibility 23. **Dedicated Data Lines:** 3 T1's, 1 56K, 2 cable modem, 5 DSL, and several alarm circuits.

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- Responsibility 24. **Telephone System:** Verizon long distance account billing maintenance. 55+ local voice phone lines, 90 desk phones, and two satellite phones.
- Responsibility 25. **Technology Support for Evacuation and Off Island Command Center:** when evacuating due to an emergency, prepare on-island systems for evacuation and possible shutdown. Set up technology needed to support city functions off island.
- Responsibility 26. **Technology Purchasing:** MIS handles research and pricing for most technology purchases.
- Responsibility 27. **Billing and Online Banking:** maintain and support the capability for bimonthly payroll and quarterly utility billing.
- Responsibility 28. **Administer City Electronic System:** biometric controlled access system to server rooms.
- Responsibility 29. **Remote Video Systems:** maintain two remote video systems and obtain video copies of events as needed.
- Responsibility 30. **Non-routine Data Reports:** many departmental mail merges. Also recurring special reports such as annual indirect cost study and Sanibel property top tax revenues.
- Responsibility 31. **Security Email Lists:** member of several group email lists reporting security issues and update recommendations.
- Responsibility 32. **HTE Account Maintenance:** maintain user accounts for technical support that allows users to access corporate HTE support by web.
- Responsibility 33. **Technology Coordinator for Amateur Radio Volunteers:** reviews and facilitated technology recommendations from the radio volunteers.
- Responsibility 34. **Electronic Public Requests:** sole source when a public record request is made of digital systems and/or the request is for the info to be provided digitally. This frequently includes CD copies of City meetings.
- Responsibility 35. **City Technology Budget:** plan, deploy and maintain equipment based on 5 year CIP.
- Responsibility 36. **In House Programming:** As needed programming for short term projects that will not require a significant commitment of long term support.
- Responsibility 37. **FDLE Digital Certificates:**
- Responsibility 38. **HTE Task Force:** planning and implementation of HTE upgrade process.
- Responsibility 39. **Positron System Management:** backups, user issues, etc...
- Responsibility 40.

See the Appendix for a detailed listing of MIS supported applications.

Challenges Facing the Department

Current Staffing and Funding: Many departments are looking to new implementations of current technology to address their departmental issues. Essentially any new technology will require additional MIS resources to keep

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those systems operational. At the current level of MIS staffing and funding, it is not feasible to implement any additional technology systems without significantly decreasing the time available to work on projects.

Auditor's Findings: In previous years, the auditors have made findings that resulted in unexpected projects for the MIS department. Specifically, these audits addressed areas that resulted in significant additional effort for the MIS department: Technology Tracking/ Inventory, User Password Policy, and ensure City compliance with existing DEV Purchasing policies. There will be significant effort involved with tracking technology purchases, and enforcing the password policy. The MIS department manages most of the technology purchases, and compliance with the existing purchasing policy doubled monthly reporting effort.

Departmental Space Allocation: There is not enough space to support the operations of the Department. Currently, the 2 Support Specialists are sharing a small office. Additionally, to address the immediate needs, on-site storage units are being utilized.

The Police Department server room is full, and is operating with a supplemental AC unit. Due to the lack of space, some servers have been relocated to the main server room, but this arrangement increases network traffic, decreasing network efficiency. Further, the proximity of this location to the PD comm Tower increases the likelihood that lightning surges damage key server and networking equipment.

Also, in the event that MacKenzie Hall's systems are upgraded to support web and cable broadcasting, a control area will be needed. To support this would most likely result in converting some existing MacKenzie Hall seating to an equipment area.

Public Records: These requests are becoming more frequent for the City and with more and more information being stored digitally, retrieval will require MIS effort. A recent citizen's request drained significant MIS resources over an extended period.

Positron (PD Software Replacement and Upgrade): This has required significant MIS support during installation and will continue to require MIS resources for regular operation. This is a full replacement of the core PD applications covering dispatching, in-car field reporting, departmental reporting, integrated 911, integrated radios, and state data interfaces. All police department and MIS personnel received extended training. Data from the existing HTE system will be exported, quality checked, corrected, imported and re-checked. The network has been upgraded to support the security and access needs for wireless, in car access to City data sources.

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User Created Applications: There is a significant issue with programs and databases created outside of MIS that are used to aid in critical decisions. Departments have begun to write their own applications to fulfill business needs. It is not possible for the staff in these departments to develop sufficient expertise to write, debug and maintain software and database development. Since MIS cannot devote appropriate resources to these efforts, it is difficult to provide the support needed for use of these applications in emergency operations.

MIS Resources: Over the past 6 years, we have completed and are currently working on over 180 projects, small and large. Most of these projects were to aid in the productivity of non-MIS departments, and/or bring new, cost effective technology to the City. Specifically, the effects of these on additional needs of MIS resources are:

- 63 no net change in MIS resources
- 18 decreased the need for MIS resources
- 105 increased the need for MIS resources

The increasing technology needs and demands of the City significantly exceed the hours available at current staffing levels. The result is increasing calendar time needed to complete projects. Also, between the new systems and disaster planning and recovery needs, the MIS department requires significantly more upper floor, secured space, at City Hall. With current staffing levels, it is impossible to address many departmental projects, which adversely affects those departments' efficiency and basic operations. Currently, the MIS department has found it necessary to place a moratorium on any new projects without the express approval of the City Manager.

These issues and trend of MIS Resource Allocation Tracking have lead to a strong recommendation to increase MIS funding for contractual assistance and increase staffing levels.

Current Issues and Tasks Currently on Hold Due to Insufficient MIS Resources

Internal Administrative Tasks

- The primary responsibility of the MIS department is maintaining the technology assets currently deployed so that employees can perform their daily work. This puts "internal paperwork" tasks low priorities, so there is a backlog for these tasks. MIS would benefit from administrative assistance with the process of technology procurement and departmental service reporting.

Projects

- **Police Department MugShot System.** The PD identified a system they require to manage mug shots electronically.
- **Remote Data Connectivity for Employees.** The Finance director has requested the ability to work on city projects while out of the office. We

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have the technology in place that is utilized by MIS, but extending this capability to non-MIS users will require MIS time to set up, and trouble shoot problems.

- **HTE Document Management Server (“DMS”).** The Building department requested a more efficient process for printing out Permits, certificates and licenses. HTE has a product for this that will also allow this type of printing to be integrated with MS Word.
- **Cognos Reporting for HTE Data.** Finance has requested more detailed and flexible reporting to download data from HTE general ledger into Microsoft products like Word and Excel so that further data analysis can be performed.
- **Operating Policies Creation.** There are several processes that are currently performed, but should be backed up with written policies. For example:
 - Users are not supposed to add software or devices to their computers, but there is no official written policy.
 - City employees are aware of document handling requirements for letters, faxes, and memos and document retention. Email is no different, and users are supposed keep emails or print and file as necessary to comply with document retention, but there is no policy.
 - What to do with the email in the accounts of employees that are no longer working for the City.
- **New Information and Content for the City Web Site**
 - Natural Resources has worked with other local agencies to develop fire information they have called Firewise.

Goals and Objectives

Current FY Goals: 2006 – 2007 Goals

Goal #1 Upgrade 20% of City’s Computers and Software.	Complete. Selected user PC’s have been upgraded.
Goal #2 Merge county GIS data with City data. The county creates and maintains significant GIS data. Using theirs will save Sanibel the expense of recreating the date data.	A consultant will be retained to assist with the development and implementation of a GIS Plan. This is a significant effort best facilitated with expert assistance.

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<p>Goal #3 Upgrade network to isolate devices that are susceptible to damage from lightning strikes and reduce chance of water damage from leaking roof.</p>	<p>Devices that might allow surges to propagate in to the PD server room were either upgraded with surge protection or converted to fiber.</p>
<p>Goal #4 Add additional areas of interest to the PD video system.</p>	<p>Complete. Additional video capabilities are being extended to the Rec Facility and Lighthouse Park.</p>

Next FY Goals: 2007 – 2008 Goals

<p>Goal #1 Upgrade 25% of City's Computers and Software.</p>	<p>Recommending to Council that we change from a 5 year replacement program to a 4 year replacement cycle.</p>
<p>Goal #2 Add additional areas of interest to the PD video system.</p>	<p>The PD has recommended that the Bowman's Beach area be the next area for video cameras.</p>
<p>Goal #3 Identify projects that can be implemented fully by outside contractors.</p>	

Summary

The department is responsible for supporting and implementing the technology projects for the City. The most pressing issue for the department is the timely support for user issues and moving forward with new technology projects. Almost all of the new projects require everyday MIS support in the form of user assistance, data backups, and process/server monitoring. So while these new projects have brought new efficiency to the departments requesting the technology, they increase the daily demands on the MIS department.

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There are certain projects in planning and development that will demand significant MIS resources to routinely support:

- Paperless agendas and conversion of city documents to electronic format
- Technology tracking as recommended by the Annual Financial Audit
- Upgrades to Mackenzie hall to include new sound equipment, streaming content to the web and broadcasting meeting over cable
- Continued training of staff in technology use
- Expanded wireless remote access to city systems
- GIS technologies for PD reporting, disaster recovery and integration with Planning and Building permitting.
- Upgrade of current Planning, Building, Finance, Utility, and Code Enforcement main software programs (HTE) to the current and more functional versions. This will allow citizens to access permitting info from the Web and allow integration of City Data with GIS.

Lastly, the physical capacity and space available in the City to support the equipment and personnel needs of the MIS department have been exceeded.

Departmental Recommendations to Address Current Productivity Issues

Details will be provided later in this narrative, but overall, the MIS department has crossed over the tipping point where the allocation of available resources to support the existing systems prevent the implementation of new projects in a timely manner.

In a city the size of Sanibel, it makes the most sense to centralize all technology issues within the MIS department. Putting dedicated technology resources in outside departments is very inefficient because only the MIS department has the experience and depth to adequately address technology needs. Also, the MIS department maintains consistency across all city systems, ensuring proper technology implementations with regards to disaster preparation, systems security and disaster recovery.

The MIS department continues to be responsible for more and more systems that must be 100% operational 24 hours a day. At the current staffing, this is unworkable with 2 Support specialists.

Therefore, the MIS department recommends:

- Significant increases in the funding for professional services. This will allow the department to contract with qualified companies to perform specific projects. Also, it will allow the department to hire temporary, short-term contractors to aid in times when the city demands are high.
- Hire 1 additional Support Specialist
- Hire 1 administrative assistant.

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Productivity Measurements

- Less than 10-minute response time for critical Public Safety technology issues, 24 hours a day, 365 days a year.
- Minimal un-scheduled system down time with maintenance performed off normal business hours.
- Current FCC radio licenses.
- Post all press releases and City Council agenda packets
- Maintain up to date Microsoft patches, security notices, and anti-virus definitions.
- Ensuring the City backup schedule completes successfully every day.

	<i>May 2004</i>	<i>2005</i>	<i>May 2006</i>	<i>May 2007</i>
<i>Open Projects (currently being worked)</i>	<i>Not tracked</i>	<i>44</i>	<i>20</i>	<i>32</i>
<i>Projects Awaiting Work</i>	<i>Not tracked</i>	<i>54</i>	<i>123</i>	<i>101</i>
<i>Council/Special Meeting Packets Posted and Emailed</i>	<i>Not tracked</i>	<i>34</i>	<i>33 (FY to date)</i>	<i>48 (FY to date)</i>
<i>Press Releases Posted and Emailed</i>	<i>Not tracked</i>	<i>163</i>	<i>291 (FY to date)</i>	<i>273</i>

On January 1, 2006, the MIS department began detailed tracking of resource allocation. Last year, MIS tracked 62% of the resources on routine support and 22% on new projects. This information is shown the Graph 1. A monthly breakdown is shown in Graph 2.

MIS Resource Allocation March 2006 – January 2007

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Graph 2

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Note: Training is the professional training of the MIS staff.

Current Year (FY 2007) Accomplishments

Accomplishment	Net Effect MIS Support
Create new line pool for use by Dispatch in the event of an emergency call followup that does not go through Verizon long distance dialing account codes.	More
Upgrade Selected Server Room Communications to Fiber to Minimize Exposure to Lightning Damage.	Less
Update MIS SEMP Plan	More
Process to Facilitate Quicker Generation of Late Sewer Billing Notices	More
Cell Phone Usage Policy: consolidate accounts and close un-needed	Maybe less
2 RFP and Bid Projects: Rec Facility Phone System, and City Data Wiring Contractor	Less
Police Department Request For A Database For Hurricane Pass Distribution Management and Tracking	More
Upgrade The City's Main Server That Supports Entire Computer System: current IBM As400 is at end of life and needs to be replaced with current iSeries.	Less
Application Review of Building, Planning, Finance, Utility (HTE): Review if HTE is the best solution for the software needs of payroll, GMBA, cash receipts, utility billing, purchasing, planning development, building	More

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permits, and occupational licenses.	
Replacement PD In Car Digital Video System: current system needs to be replaced with newer technology: increase server count by 1	More
Upgrade Servers to Win2003	Neutral
Camera recording System for Rec van	More
Parking PC: System to allow parking to process Cash and access to HTE invoice printing (audit finding)	More
Dedicated Data Connection to Lee County Sheriff: increased network connection by 1	More
Implement Digital Security Certificates for Access to FDLE Data	More
Move City Email Server from ISP to City Hall, upgrade Anti-Spam and Anti-Virus: increase server count by 1	More
New Technology Systems Requirements for New Rec Center: Video, security, and Facilities Tracking/Use System	More
Replace City Email List Server Service and Integrate all City Email Addresses: community leaders, partners, and all city list recipients	More
Secure Authentication For External Network Users (Netmotion): increase server count by 1	More
Verizon Lease Agreement Technical Issues	Neutral
Set Up HTE to be Used for Building Contractor Licensing	More
Repair PD Tower Antennas Damaged by Wilma: OSHA Required Tower Upgrade, Damaged Alert Radio Antenna, Re-cable to Increase Storm Survivability	Neutral
HTE for Special Events Permitting	More
Remote Weir Water Level Monitor: increase server count by 1	More
GIS based Dispatching System: increase server count by 1	More
Upgraded PD Field Reporting System: increase server count by 1	More
Integrated Dispatch and PD Reporting: increase server count by 2	More
Upgraded 30% of PD computers: increased PC/laptop count by three	More

Current Year (FY 2007) Expected Accomplishments

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Accomplishment	Net Effect MIS Support
Implement Data Backup Policy and Enforce	More
Allow Full Reporting Access Remotely to PD Squad Cars: security server, field reporting, license lookups	More **
SEMP Emergency Comm Van	More **
Lighthouse Video System: increase server count by 2	More **
Technology Purchasing Tracking Policy	More **
AM Radio	More
Post Valid Occupational and Building Licensee Info to Web	More
New Phone System for Rec Center	More
Upgraded HTE Financial Reporting	More
Upgraded City Procurement Card Tracking	More
Rec Facility Video System: increase server count by 1	More **
Rec Facility Security System: increase server count by 1	More
HTE Application Upgrades Planning: some upgrades in 2007	More
Public Safety Frequency Rebanding: final channel will not be cleared until after hurricane season and this channel is managed by the State	Neutral
Convert City's Long Distance from Suncomm and AT&T to Verizon	Neutral

** The expected implementations of these projects will require very significant allocations of MIS resources for their day-to-day operations.

Potential Revenue Sources

The MIS department does not generate revenue sources. Creation of some kind of long term technology fund, funded by small amounts, over a long term, that could be allocated on as needed, for large scale capital projects. Unfortunately, various industries have been very effective at legislating that ability out of the hands of local governments.

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APPENDIX

City of Sanibel Software Applications Supported by MIS Department
As of June 14, 2007

MS Word	Blackberry, Palm, Sony Clie PDA
MS Excel	Applications
MS PowerPoint	Think Database PDA
MS Access	Norton Antivirus
MS Outlook	Norton Firewall
MS Internet Explorer	Zone Alarm Firewall
MS Security Certificates	ADT Video Camera and Archive
MS Media Player	Rec Center Video Camera and Archive
MS SQL Server	Battery Backup Monitoring
MS FrontPage	Cognos Impromptu QRep
MS Firewall	DCC Community Notification (Reverse Dialer)
Microsoft Visio - Drawing and Maps	Past Perfect - Museum Inventory
Windows 98, 2000, XP	Total Recorder - Audio Copies of Meetings
IBM Client Access - AS400/HTE access	Hurrivac
AutoCAD - CAD Drawing and GIS	Hurritrak and SLOSH Modeling
Various CD and DVD Burning programs	Visual Statement - PD Accident Reporting
FTR Digital Recorder/Player Software - Mackenzie Hall	FDLE EAgent - FBI and All States Records
PaintShop Pro	Lee County Locals - Wants and Warrants
Adobe Acrobat Reader	PD Missing Persons National Notification
Adobe Acrobat Professional	CJNet Intranet - Pawnshops, State Drivers License
Adobe Audition Audio Editor	Lee County Courts Booking System (UBS)
WinZip	Bank of America Online Banking
Terminal Services Client - Server Access	Public Works Weather Station
VMWare	DBase Planning Historical Database
NT Backup	POS Partner – transmits credit card transactions from PC to clearing house
HP Network Print Manager	Schlumberger Park Folio – downloads credit cards transactions from handhelds to PC
LaserFiche - Electronic Documents	Positron Dispatching
Paintshop Pro	Positron Records Management
IfFanView Graphics Viewer	Positron In Car Reporting
ESRI ArcView - GIS	Net Motion Remote Access